10. ENVIRONMENTAL ISSUES RAISED ABOUT THE FEIS

During the 30-day review period, comments were received from the following in response to the FEIS:

Federal Agencies

- Department of Health and Human Services
- Department of the Interior
- Department of Transportation, Federal Transit Administration
- US Environmental Protection Agency

Local Agencies/Interest Groups

- City of Woodson Terrace
- St. Clair County Board
- St. Charles R-6 School District
- Office of the County Executive, St. Charles County
- City of Bridgeton
- City of St. Charles
- National Air Traffic Controllers Association
- Air Line Pilots Association
- People Building Community
- St. Charles County Citizens Against Aircraft Noise
- Bridgeton Air Defense

Interested Citizens

- 161 letters from interested citizens

Letters from the public echoed many of the comments received from the local governments and interest groups. Most of their comments were in the areas of noise, airport planning, alternatives and public involvement.

No substantive comments were received from the public on the following categories after the release of the FEIS: hazardous materials; water quality; historic, architectural and archaeological resources; biotic communities; endangered and threatened species; wetlands; farmlands; energy and natural resources; light emissions; solid waste impacts; construction impacts; cost considerations; environmental justice; surface transportation; floodplains; and design, art and architecture.

The FAA has carefully assessed and considered comment letters received on the FEIS in making its decision. Copies of these letters are available for inspection at the FAA Regional office. While not every comment in every letter has been addressed, Appendices A, B, C, D, E and G of this ROD provide detailed responses to comments on major issues raised by the principal commenting agencies and citizen groups. Airport planning issues raised in comments on the FEIS are summarized previously, in Section 9 of this ROD. The major environmental issues raised in comments on the FEIS are summarized below.

1. Flawed purpose statement includes dual simultaneous independent arrivals

Commenters contend that dual simultaneous independent arrivals are not a legitimate purpose and need.

The purpose and need statements contained in the FEIS present an accurate description of the purpose for the project and the reasons why the proposed Lambert action is needed. The FEIS, Section 2.0, Purpose and Need, identifies four major elements of the purpose of the proposed Federal action.

The first major element listed is associated with capacity and aircraft delay. One of the sub-items identified under capacity and delay is the development of a capability for dual simultaneous independent IFR arrival operations. This capability was identified as far back as the FAA's 1986 Capacity Enhancement Study, done by the FAA Technical Center. It was subsequently identified in the master planning process. Both the FAA and STLAA determined, based on the forecasts of aviation demand and analysis of existing airfield capacity, that a third parallel runway and a separation of at least 3,400 feet between the outboard parallel runways would have the greatest potential to reduce aircraft delays during adverse weather conditions. This capability was identified as a subordinate item under the general purpose of enhancing capacity and reducing delays, reflecting the operational importance of improving airport capacity during poor weather (IFR and VFR-3) conditions. This was the major capacity problem identified by the master planning process and confirmed by the FAA Technical Center's independent evaluation.

The City of Bridgeton commented both on the DEIS and on the FEIS that the FAA has unduly narrowed the purpose and need and skewed the analysis of alternatives by relying upon simultaneous instrument arrival capability as a factor. The inclusion of dual simultaneous independent IFR arrival operations at Lambert did not unduly narrow or restrict the consideration of alternatives.

It was reasonable to include simultaneous arrival capability during instrument meteorological conditions as a sub-element of the general purpose and need of enhancing capacity based on the 1986 and master planning studies. Simultaneous arrival capability did not skew the analysis of alternatives because it was one of seven project goals or factors weighed by FAA, along with reducing delay and enhancing capacity generally both at Lambert and in the NAS during visual meteorological conditions, consistency with local planning, and consistency with economic goals (FEIS, Section 3.2, p. 3-3-3-6). These factors, derived from the purpose and need section of the EIS (FEIS Section 2.0), are listed in Section 4 of this ROD. Subsequently, operational efficiency, financial and environmental concerns were considered in the decisionmaking process.

While independent arrival capability during IMC was dispositive in dismissing Alternative NE-1a in the DEIS, two other similar north airfield alternatives met this requirement and were retained for further consideration in Tier 2.

Even if simultaneous independent arrival capability in IMC was an overriding factor, the analysis of alternatives was not skewed because all but one of the eight development alternatives carried forward from the MPS met the criteria. In addition to Alternative W-1W, of the onsite airfield alternatives, Alternatives NE-1, N-1, C-1, W-1E, W-2 and S-1 met the simultaneous arrival capability criteria (FEIS, Table 3.7, p. 3-35). Alternative S-1, which had simultaneous independent arrival capability, was one of the reasonable alternatives evaluated fully throughout the EIS process. A recent NASA study indicates that additional runways, providing independent IFR capability, are one of the most promising strategies for improving capacity in the NAS (Pages 24-26 of the NASA study, attached to the City of Bridgeton's comments on the FEIS dated February 2, 1998). That the FAA and STLAA view independent arrival capability as important and the most plausible goal is not unreasonable because others might consider the lower levels of capacity and delay reduction of NE-1a tolerable.

The analysis of alternatives was also not skewed because the FAA has done supplemental analysis to assure that it did not elevate independent arrival capability over the larger project goals. In the DEIS, the FAA examined the FAA Runway Capacity Model and FAA Annual Delay Model results that estimated the capacity and delay associated with Alternative W-1W, and Alternative S-1, along with the other alternatives N-1, NE-1, NE-1a, C-1, W-1E, W-2 and the No-Action Alternative. This analysis indicated that Alternative W-1W provides greater capacity benefits than the No-Action Alternative. In response to comments on the DEIS, the FAA examined Alternative NE-1a in more detail in the FEIS (FEIS Section 3.3.4.1). Further examination in the FEIS indicates that Alternative NE-1a was not a reasonable alternative because it has substantially higher average annual delays, total annual

delay and more runway crossings than the alternatives studied in detail in the EIS (MPS Section 3, Attachment D-2).

In response to further comments from the City of Bridgeton, ALPA and NATCA, that questioned the validity of the modeling assumptions used in the FEIS, the STLAA, with oversight from the FAA, conducted a sensitivity analysis in June 1998 that included Alternative NE-1a. This sensitivity analysis assumed, for the sake of argument, the truth of four different assumptions posited by these commenters. The sensitivity analysis indicated that Alternative W-1W increases capacity and reduces delays better than Alternative NE-1a and the No-Action Alternative. The commenters do not identify any alternative that provides capacity or delay reduction benefits comparable to or greater than Alternative W-1W but lacks simultaneous independent arrival capability.

This comment is very similar to prior comments on the DEIS. See responses to Comments 1-14, 1-21 and 1-49 in FEIS Appendix V.

2. FEIS flawed based on tiering process for screening alternatives

There were concerns that the FEIS and its alternatives analysis do not meet the requirements of NEPA, because the tiering process used by FAA to screen alternatives was flawed.

While some commenters believe that the FEIS is flawed, the FEIS is a comprehensive document that fully meets the spirit, intent and requirements of NEPA as well as other substantive statutes. The FAA prepared an evaluation of the proposed action through the EIS process as required by NEPA. The purpose of an EIS is to consider alternatives, present probable environmental impacts and examine possible mitigation to address the significant adverse environmental impacts of those alternatives. The FEIS identifies significant adverse environmental impacts for the preferred alternative and contains appropriate mitigation for those significant adverse environmental impacts.

The FAA solicited comments from interested parties, starting with the scoping process on the DEIS, and continuing throughout, so that it could correct any deficiencies in the documents and provide any additional analyses needed in the FEIS. As examples, because of comments received on the DEIS, the FAA supplemented its FEIS noise analysis with grid points outside the 65 DNL contour, and supplemented the air quality analysis to further describe issues of interest to EPA and MDNR.

The FAA worked closely with each jurisdictional agency to ensure that its concerns were adequately addressed in the FEIS. The EPA expressed satisfaction with the Draft General Conformity Determination, which demonstrated that the project meets the

requirements of the Clean Air Act (EPA letter dated April 22, 1998, in Appendix A of this ROD). The DOI and MDNR commented on requirements of the Land and Water Conservation Fund Act and DOT Section 303 (also referred to as Section 4(f)) and had no outstanding issues remaining. Along with the FAA and the STLAA, the SHPO and Advisory Council on Historic Preservation signed an MOA (Appendix H of this ROD) that satisfies the requirements of the National Historic Preservation Act. The Corps of Engineers was consulted and had no objections to the proposed wetlands mitigation concept. These examples demonstrate that the FAA has fulfilled the procedural and substantive requirements of NEPA as well as other environmental statutes and requirements.

Regarding the FAA's tiering process and alternatives analysis, a full and comprehensive range of alternatives was explored by the FAA in the Federal EIS process. The EIS examined the alternatives of using a multiple airport system, using existing or proposed regional airports as a replacement or supplement to Lambert, development of a new airport, other modes of transportation and use of other runway configurations at Lambert.

The Council on Environmental Quality (CEQ) regulations require that reasonable alternatives be comprehensively considered and an explanation be provided as to why other alternatives were eliminated from detailed consideration. The FAA used a three-tiered analysis process, which the EPA acknowledged as meeting the requirements of NEPA, to determine the reasonable alternatives that were subject to detailed analysis. Alternatives that were not considered reasonable were not retained for detailed evaluation. In order to be carried through for detailed analysis, an alternative had to meet all the purposes and needs for the proposed action.

In its letter dated February 27, 1998, the EPA expressed concerns regarding the alternatives analysis in the FEIS. The FAA provided additional explanation to EPA in a letter dated April 9, 1998, and the EPA responded, in a letter dated April 22, 1998, that its remaining concerns had been resolved (Appendix A of this ROD contains these letters). In that letter, the EPA stated the following: "I believe it is important to note that while we may have expressed disagreements or requested clarification in the areas of air quality and noise impacts, our comments on the FEIS should not be viewed as questioning whether the FEIS met the spirit, intent, and requirements of NEPA in these two issue areas. Our comments concerning NEPA requirements were directed solely at the issue of the alternatives analysis contained in the FEIS, and particularly the role of economic factors in the screening process for the alternatives."

The tiered alternatives analysis presented a logical, objective means to screen all alternatives considered in the study. The tiered evaluation retained two reasonable alternatives, W-1W and S-1, for detailed evaluation, not just the sponsor's proposed

action. In its letter of April 22, 1998, the EPA stated that the tiered screening analysis of alternatives, based on the particular purposes and needs identified for this project, represented an adequate screening of the alternatives consistent with the requirements of NEPA. In its response to FAA's clarification of the alternatives analysis, the EPA responded: "As we indicated in our earlier correspondence, our Agency supports the concept of screening a full range of alternatives against a project's purpose and needs to identify which alternatives are reasonable, and are carried forward for detailed analysis. We believe this approach meets the spirit, the intent, and the requirements of NEPA, provided that the process is conducted in a valid, legitimate manner. With the additional clarification provided in your letter of April 9, 1998, we better understand how FAA conducted the tiered alternatives screening, and believe that the analysis of alternatives, based on the particular purpose and needs identified for this project, represents an adequate screening of the alternatives consistent with the requirements of NEPA." Thus, the FAA's analysis of alternatives fulfills the requirements of NEPA.

These comments also do not raise entirely new issues, but are similar to comments previously raised on the DEIS. Tiering was discussed in the FEIS Appendix V, responses to Comments 2-74, 2-77, 2-78, 2-121, 2-131, 2-132, 2-133, and 2-134. The alternatives selection process was discussed in the FEIS responses to Comments 211, 2-15, 2-29, 2-58, 2-72 and 2-85.

In summary, the FEIS, including its alternatives analysis, is a comprehensive document that fully meets the spirit, intent and requirements of NEPA.

3. Use of Scott AFB/MAA

Citizens questioned why Mid-America Airport (MAA) could not be used as an alternative to supplement or replace Lambert.

The FAA believes that the effects of the future development of MAA on Lambert have been fully considered in the FEIS. The use of other airports, including MAA, as a hub or to supplement Lambert is not considered a viable alternative to the planned development of Lambert. At the present time, it appears that the capital investment required, the travel distance involved, and the impact on airline hub operations exceed the benefits derived. However, all airports in the St. Louis area were examined in the FEIS to determine their capability to handle commercial traffic.

In order to be carried through for detailed analysis, an alternative had to meet all the purposes and needs for the proposed action. Alternatives eliminated during Tier 1 of the analysis did not meet aviation-related project purposes and needs and were not considered reasonable. All off-site alternatives were found to be unreasonable alternatives in terms of the first tier of the analysis. In the EIS, we discussed

specifically how the off-site alternatives, such as MAA, did not maintain a passenger hub at Lambert, a key component of the project need. If a proposed alternative could not enable Lambert to effectively function as a hub by safely accommodating projected levels of aviation activity at an acceptable level of delay, then it would serve no purpose to carry that alternative forward for detailed evaluation.

The lack of a sponsor for airport expansion in another political jurisdiction is a reality that the FAA is authorized to consider under CEQ regulations and the rule of reason. The FAA has received correspondence from St. Clair County, the operator of MAA (which is a joint-use facility with Scott AFB), that indicates it supports Lambert as the regional hub (FEIS Appendix A, pages A-20 and A-21). There has been no correspondence from St. Clair County or any other political entity in the region that indicates the desire to be the sponsor of such a hub airport.

Section 3.3.3 of the FEIS contains a thorough analysis of the MAA alternative. Also, comments on this alternative were received after release of the DEIS and FAA provided explanation of its elimination from consideration in FEIS Appendix V responses to Comments 2-3, 2-33, 2-45, 2-60 and 2-120.

4. Selection of Modified S-1 alternative

Some groups favored the Modified S-1 alternative, which was supported by ALPA, and believed FAA should select that alternative rather than Alternative W-1W.

An analysis contained in Section 3.3.4.3 of the FEIS details the environmental impacts associated with the Modified S-1 alternative. ALPA has proposed two versions of the Modified S-1 plan. It was estimated that the 1993 version would involve the purchase of nearly twice the number of homes, and the overall environmental impact would greatly exceed Alternative S-1. While the 1996 version would affect substantially fewer homes, simple review of the Modified S-1 plan reveals that it would so severely impact I-70 that the cost and construction difficulties make it unreasonable and also less desirable than Alternative S-1. As indicated in the FEIS analysis, this alternative would have significantly greater environmental impacts when compared to Alternative S-1. Therefore, after examination of the Modified S-1 alternative, the FAA eliminated it from further consideration, because there were no operational or cost advantages when compared to Alternative S-1.

These comments do not present significantly new issues. Similar comments were made on the DEIS. FAA previously provided responses to those comments (FEIS Appendix V responses to Comments 2-5, 2-27, 2-104, 2-140 and 2-155).

5. Selection of Alternative NE-1a

NATCA and other commenters suggested that FAA should select Alternative NE-1a as its preferred alternative. In comments provided on the DEIS, NATCA outlined numerous reasons why it believes that runways separated by 2,500 feet would meet Lambert's needs.

Although Alternative NE-1a provides only a 2,500-foot separation between the outboard runways, it was included and studied in detail in the MPS at the request of the airlines. One of the purposes of the proposed action is to increase IFR capacity, as well as VFR capacity. Alternative NE-1a was eliminated from detailed environmental analysis in the DEIS because it provides less than the 3,400-foot separation needed for simultaneous, independent arrivals in either IFR or VFR weather conditions.

In comments provided on the DEIS, NATCA outlined numerous reasons why it believed that runways separated by 2,500 feet would meet Lambert's needs. FAA's detailed responses to NATCA's comments are provided in responses to Comments 1-52, 2-157 and 2-158 in the FEIS Appendix V. Other FEIS Appendix V responses to comments that discuss Alternative NE-1a include Numbers 2-27, 2-40, 2-89, 2-90, 2-119, 2-126 and 2-139. In response to these comments, FAA conducted further analysis of NE-1a in the FEIS (FEIS Section 3.3.4.1). The analysis indicated that Alternative NE-1a increases the number of runway crossings over existing conditions, as well as over Alternative W-1W. Additionally, more significant interactions between arrivals and departures would be expected with NE-1a as compared to the other alternatives. Thus, the FAA did examine the alternative preferred by NATCA, NE-1a, but eliminated it from further consideration.

6. Selection of the Lambert 2020 alternative

The City of Bridgeton stated that the FAA should select the Lambert 2020 alternative, which was proposed by the City of Bridgeton.

The City of Bridgeton's Lambert 2020 Plan as submitted was very general in nature. However, the Lambert 2020 Plan is very similar to Alternative NE-1a, particularly as to runway location. The Lambert 2020 Plan calls for a third parallel runway in the same location as Alternative NE-1a. It does not meet the purpose and need, primarily because the runway spacing would only be 2,500 feet, which would not permit simultaneous, independent arrivals in poor weather conditions.

Section 3.3.4.5 of the FEIS provides further details regarding the elimination of this alternative. The Lambert 2020 plan was also previously discussed in FEIS Appendix V responses to Comments 2-24, 2-109 and 2-141.

7. EPA concerns with noise impact analysis and noise mitigation program

The EPA expressed concerns that the noise impact analysis and noise mitigation program, as described in the DEIS, werenot adequate. Those concerns were addressed in the FEIS, Appendix V, responses to Comments 3-77, 3-78, 3-79, 3-87 and 3-99.

The EPA was under the impression from the DEIS that the FAA deferred mitigation to a Part 150 study, which was not our intention. The FEIS states that mitigation for the EIS is separately required and not dependent upon a Part 150 study (Section 6.3.1 of the FEIS).

Regarding noise impacts, the FAA believes it provided a comprehensive analysis of noise impacts, including an analysis of the areas that will experience a 3-dB increase in the 60 to 65 DNL contour. Although it was not the type of analysis that the EPA expressed an interest in seeing, FAA believes that the extended analysis is within the framework of the Federal Interagency Committee on Noise (FICON) guidelines and public disclosure requirements under NEPA.

With respect to the EPA's suggestion for clarification of proposed mitigation, as stated in the FEIS, the FAA has determined that the mitigation programs will consist of: (1) for areas 70 DNL and higher, residential and residentially zoned areas will be acquired; and (2) for areas 65-70 DNL, a voluntary mitigation program (sound insulation or residential sales transaction assistance) will be offered for residences and community facilities, including schools, and mobile home parks will be acquired. For areas between 60-65 DNL, we have determined that mitigation measures are neither appropriate nor practical. We note also that the STLAA has an ongoing, FAA-approved FAR Part 150 Noise Compatibility Program, which already provides mitigation for existing and future noise impacts around the airport.

The FEIS noise mitigation program was explained to EPA staff, who concurred that it is sufficient. Therefore, the FAA believes its noise analysis and mitigation program adequately meet the spirit, intent and disclosure requirements of NEPA.

The development of Alternative W-1W will not reverse ongoing efforts to provide relief to residents impacted by existing airport noise. The airport is continuing with its Part 150 program, approved by the FAA in 1997, to address noise issues related to existing airport operations.

The STLAA is planning to install a new permanent noise monitoring and flight tracking system, intended to assist in the management of its noise program and monitor the

effectiveness of operational noise mitigation measures, such as directing aircraft to turn over the Missouri River bottoms. Once a full year's noise and flight track data showing the actual noise levels and flight tracks resulting from the operation of the new west runway are available and have been analyzed, an adjustment will be made to the mitigation program, if appropriate.

8. Increases in noise and overflights in communities west of Lambert

Citizens in communities west of the airport, such as Bridgeton, St. Charles and Maryland Heights, question the noise analysis and believe there will be large increases of noise and overflights in their communities

The noise exposure analysis was prepared by Greiner and reviewed and approved by the FAA. Flight tracks were developed by Greiner under the direction of the FAA, utilizing information from FAA Air Traffic Control Specialists, analysis of Automated Radar Terminal System (ARTS) data and information gathered during field observations. The FAA's Integrated Noise Model (INM) was used to model dispersed flight tracks, which represent corridors of aircraft flight activity. Departure and arrival flight tracks used in the noise analysis represent average conditions, including both instrument and visual flight conditions. Flight tracks for Alternative W-1W were developed based on a 3-parallel runway configuration. The aircraft operations mix was developed through coordination with the FAA ATCT, airlines, the Missouri Air National Guard and other airport users. Information was also obtained from aircraft manufacturers regarding aircraft performance characteristics of existing and new generation aircraft. Projections of future operations were closely coordinated with the FAA and aircraft operators. Therefore, the noise exposure analysis and noise exposure maps contained in the FEIS are based on the most accurate information available regarding the current and predicted future operation of the airport. The flight paths projected do represent annual average conditions. We note, however, that flight paths may change from day to day because of wind, weather or other conditions.

Although noise measurements are not required for an FEIS, since the airport has had a permanent Noise Monitoring System, data collected by the Noise Monitoring System were used for the EIS. The purpose was to provide validation of, or adjustments to, the data base provided in the INM computer model. On-site noise measurements provided data to compare with that provided by the prediction model for the existing condition. Measured values were compared with the noise levels derived from the INM. On the basis of this comparison, it was concluded that the measured values of these sites were within reasonable conformance with values calculated by the computer program. No manual adjustments not already included in the computer model were required due to terrain or climatic variations. The INM noise analysis results correlated to within 1 dB of the actual monitored results (Section 4.2.4.2 of the FEIS).

Airplanes will fly over St. Charles or Maryland Heights. Departing flight tracks will not be concentrated over the central portions of the City of St. Charles. For the existing runways and the proposed new runway, departure corridors to the southwest would be over the Missouri River Bottoms. This would generally place aircraft over the Missouri River Bottoms, rather than over the City of St. Charles. Departure Track T46, as shown in Figure 5.7 of the FEIS, will be located over St. Charles. Tracks T47, T48 and T49 are also departing flight tracks from Runway 30W, which do not go over the City of St. Charles. As indicated in the FEIS Appendix F, Table F.21, of all the departures on Runway 30W, only 33 percent of general aviation and small and medium commercial jets will utilize Track T46. All large commercial jets and military jets, as well as 67 percent of general aviation and small and medium commercial jets departing from Runway 30W, will utilize Tracks T47, T48 and T49, which do not impact the City of St. Charles.

In summary, after Runway 12W/30W is operational, certain neighborhoods in St. Charles and other communities west of the airport will be overflown more directly and at shorter slant ranges than they are at present. Because of the effects of the introduction of quieter Stage 3 aircraft, noise levels are projected to decrease in future years. With the implementation of Alternative W-1W and the increased percentage of Stage 3 aircraft, the FEIS grid point analysis conducted for locations C01 through C06 in St. Charles indicates that noise levels at these locations will be well below the DNL 65 dB threshold. By the year 2002, aircraft noise levels will have decreased to below DNL 60 dB, with or without Runway 12W-30W.

Similar comments previously received on the DEIS regarding noise increases and flight tracks were addressed in responses to Comments 3-17, 3-86, 3-93, 3-102, 3-103, 3-107 and 29-62 in Appendix V of the FEIS.

9. Current noise levels in St. Charles

According to an independent noise study commissioned by the City of St. Charles and prepared by Engineering Dynamics International (EDI), St. Charles is currently experiencing high noise levels.

The current noise situation in St. Charles is not associated with the proposed Runway 12W/30W alternative. While some areas in St. Charles may currently experience noise levels between DNL 60 and 65 dB, they are not related to the proposed expansion, including Runway 12W/30W.

Section 4.2.4.2 of the FEIS contains a detailed analysis of the existing noise environment in the Lambert study area. Based on the information contained in this

section, the St. Charles area is outside the DNL 65 dB contour area. This conclusion is supported by the results of both the St. Charles County Government study, prepared by EDI, and the FEIS. The EDI report was considered by the FAA in its preparation of the FEIS. In Appendix V of the FEIS, responses to Comments 3-43 and 3-54 address the findings of the EDI report.

10. Inappropriate use of 65 DNL as cutoff for noise impacts or mitigation

St. Charles citizens expressed the opinion that DNL 65 is not an appropriate cutoff for noise impacts or mitigation.

NEPA requires Federal agencies to evaluate the environmental consequences of a project's environmental impacts and to determine whether they are potentially significant. In some impact categories, that significance is determined by reliance upon certain thresholds or standards. In this case, the FAA used the 1.5 dB or greater increases in noise within the DNL 65 dB.

In 1979, Congress directed the FAA to adopt regulations to establish standard methodologies for measuring noise and guidelines for determining noise levels at which land uses are compatible with various levels of noise exposure (*49 U.S.C. 47502*). In 1981, the FAA issued 14 CFR Part 150. Under FAA guidelines, residential land uses are compatible with noise exposure levels below DNL 65 dB. The FAR Part 150 guidelines were established after years of extensive consideration by various agencies (i.e., EPA, HUD, FAA) of the impact of aircraft noise on people. FAA's policy decision regarding the selection of DNL 65 dB as the threshold of significant noise impact is based upon a variety of noise studies such as Impact of Noise on People (USDOT, May 1977) and Guidelines for Considering Noise in Land Use Planning and Control (Federal Interagency Committee on Urban Noise, June 1980). This study states that "a valid indicator of noise impact is the changing percentage of population associated with a given response category." The study indicates that at DNL 65 dB, 30 percent of the population rate noise as unacceptable, while 70 percent rate noise as acceptable. Use of the 65 DNL contour as the threshold of significance under FAA Orders 1050.1D and 5050.4A, which implement NEPA, is well established and has been judicially approved.

As discussed below, a DNL grid point analysis was done for certain noise-sensitive locations, including some residential areas in St. Charles. However, the FAA properly determined not to analyze alternative mitigation measures in areas surrounding the airport like St. Charles that would experience less than significant cumulative noise exposure levels as a result of the proposed action. The FICON report indicates that few mitigation measures are appropriate or practical in areas below DNL 65 dB. Noise abatement adjustments to flight procedures tend to be viewed as the most likely

candidates for mitigating noise at lower levels, because they are within Federal control and do not involve changes in land use. However, this tool also has limitations. In order for a noise abatement flight procedure to be considered for analysis, there should be a reasonable expectation that a noise benefit of worthwhile magnitude would result and that implementation of the procedure is appropriate and practicable. Procedural changes usually involve moving noise around rather than eliminating it and may actually result in noise increases for some people, while reducing noise for others. It is generally expected that Federal priority will be given to mitigating noise at higher levels. It would not normally be a mitigating practice to increase the impacted population at higher noise levels in order to reduce increases at lower noise levels.

Recognizing that residents located outside the DNL 65 contour experience noise exposure, the FAA did examine noise at residential and other noise-sensitive facilities located in areas less than DNL 65. The noise impacts to St. Charles that can be expected with the implementation of Alternative W-1W are evaluated in Appendix Q of the FEIS. Table Q-1 in Appendix Q of the FEIS indicated that DNL levels will increase at three of the six grid points analyzed. However, in no instance was the DNL level in excess of DNL 60 dB with the proposed action. The table also indicates that the DNL level will decrease at three of the six grid point locations, again, with none of the locations experiencing DNL levels greater than DNL 60 dB with the proposed action. Therefore, residential land uses in St. Charles are compatible under Federal guidelines and no mitigation is required. No mitigation is warranted in St. Charles.

Comments on the DEIS stated that DNL 65 dB is not an appropriate standard for the examination of noise impacts or the establishment of the mitigation program for the Lambert expansion. The FAA explained this issue in the responses to Comments 3-10, 3-45, 3-56, 3-58, 3-67, 3-100, and 3-101 in Appendix V of the FEIS.

In summary, DNL is an appropriate noise metric and DNL 65 dB is an appropriate standard of significance. The FICON report states in Section 3 Airport Noise Policy Recommendations, “All Federal agencies have now adopted DNL as the metric for airport noise analysis in NEPA (EIS/EA) documents.”

11. Use of supplemental metrics for speech interference and sleep disturbance

Commenters requested that FAA should use supplemental metrics to determine speech interference and sleep disturbance impacts in St. Charles.

In keeping with the guidance provided by FICON, the use of supplemental metrics (such as single-event analysis) is best left to the discretion of individual agencies. At the onset of the study, and again later in the study after additional information was available, the FAA made a policy decision that the noise analysis in the FEIS would be

based on DNL contour analyses. The FAA further found that the use of supplemental metrics to analyze noise conditions in the City of St. Charles was not necessary. However, in response to comments received on the DEIS, the FAA did prepare a DNL Grid Point analysis for several sites located within St. Charles County. The results of this analysis, contained in Appendix Q of the FEIS, indicate that DNL levels at each of the six modeled locations would be below DNL 60 dB for both the 2002 and 2015 study years.

Time-Above Analysis - The FAA's decision that a Time-above analysis is not needed in St. Charles is based upon the results of the DNL grid point analyses, which indicate that St. Charles will experience noise levels below DNL 60 dB. The time-above analysis has no standards or guidelines against which it can be compared, so it provides relatively limited information.

Speech Interference and Sleep Deprivation - As discussed above, supplemental noise analysis was done by evaluating noise impacts and noise-sensitive areas in St. Charles (FEIS Appendix Q). This analysis confirmed that the cumulative noise exposure levels will not exceed DNL 60 dB with the proposed action.

The FEIS does not include supplemental noise analysis concerning speech interference or sleep deprivation in St. Charles. Impact of Noise on People (USDOT May 1977) indicates that below DNL 65 dB less than 10 percent sentence interference occurs outdoors with normal voice level and 2 meters separation. Indoor interference does not begin to appear until the DNL 70 dB level is reached. At these levels of cumulative noise exposure, only 8 percent of the population experience sleep disruption at DNL 65 dB and only 1 percent at DNL 55 dB. At levels below DNL 60 dB, less than 2 percent sentence interference occurs outdoors with normal voice level and 2 meters separation. Based on these indicators, the FAA decided that the FEIS did not need to analyze potential speech interference or sleep deprivation impacts in areas surrounding Lambert that would be exposed to aviation noise at levels below DNL 60 dB.

With regard to the St. Charles historic river front district, in particular, the FAA did not analyze speech interference or sleep deprivation impacts for that area, because the INM grid analysis included in Appendix Q of the FEIS indicates that St. Charles will be below DNL 60 dB. The FICON report states in Section 3 Airport Noise Policy Recommendations, "...because public health and welfare effects below DNL 60 dB have not been well established, the FICON decided not to recommend evaluation of aviation noise impacts below DNL 60 dB." Since St. Charles is below DNL 60 dB with the proposed airport noise exposure, further evaluations of aviation noise impacts, such as speech interference and sleep deprivation effects, in St. Charles were not deemed necessary for the FEIS.

In addition, although not required, STLAA has committed to monitor noise for one year and to adjust the boundaries of the noise mitigation program in the unlikely event that actual noise levels exceed those predicted in the FEIS.

12. Unacceptable noise and vibration impacts in the St. Charles historic district, the Goldenrod Showboat and Frontier Park

Citizens of St. Charles believe that noise and vibration impacts will be unacceptable in the St. Charles historic district and two of its unique resources, the Goldenrod Showboat and Frontier Park.

The issues of noise exposure and vibrations on the City of St. Charles and its historic district have been thoroughly discussed throughout the FEIS (Sections 5.1 and 5.5). The effects of Alternative W-1W on the City of St. Charles, including noise and vibration impacts, are also documented in FEIS Appendix Q and FEIS Appendix V in numerous responses to comments, such as numbers 3-17, 3-43, 3-54, 3-56, 3-57, 3-58, 3-68, 36, 11-2, 11-6, 23-46, 23-47, 23-53, 23-54, 23-55, 23-56, 23-57, and 23-58.

The FAA uses 1.5 dB increases in the DNL 65 dB noise contour as the standard for evaluating the effects of increases in aircraft noise on historic properties used as residences and for outdoor music areas or amphitheaters, fulfilling the requirements of 36 CFR 800.9. This is based on FAA's land-use compatibility guidelines under 14 CFR Part 150. For other historic properties, the FAA considers whether noise or other impacts due to the proximity of the project substantially impair the activities, features, or attributes of the resource.

The historic properties in the City of St. Charles, including the Goldenrod Showboat, are not expected to be within the DNL 65 dB noise contour as a result of Alternative W-1W. The results of the FAA's noise analysis indicate that with the proposed W-1W improvements, cumulative aircraft noise levels will be below DNL 60 dB in the St. Charles historic district, including the Goldenrod Showboat and Frontier Park. DNL grid sites in St. Charles for future years 2002-2015 will range between DNL 48 and 58 dB (FEIS Appendix Q). Therefore, neither the Goldenrod Showboat, a national historic landmark used for performances, nor Frontier Park, used for festivals, will be significantly impacted by the project.

There are no impacts in St. Charles that require mitigation, and there will be no new substantial incompatible land uses as defined by FAR Part 150 guidelines. Impact of Noise on People (USDOT May 1977) indicates that at levels below DNL 60 dB, less than 2 percent sentence interference occurs outdoors with normal voice level and 2 meters separation. Indoor sentence interference will occur even less frequently as a

result of the exterior-to-interior noise reduction provided by the Goldenrod Showboat. Aircraft noise levels of this magnitude will not have a significant impact on the many plays and events that occur on the Goldenrod Showboat or the festivals in Frontier Park.

One commenter noted that people occupy and care for many of the historic buildings. Under FAA noise compatibility guidelines, these buildings will continue to be compatible land uses appropriate for residential homes. Therefore, the proposed alternative will have no effect on historic properties within the City of St. Charles. The Missouri SHPO and the Advisory Council have concurred with the FAA on the area of potential effect, which encompassed land areas above DNL 65 dB.

To summarize, regarding noise impacts on historic properties in St. Charles, noise levels below DNL 60 dB are not considered significant. All land uses, including historic properties, are considered compatible with noise levels below DNL 60 dB. Given that noise levels in St. Charles are projected to be below DNL 60 dB with Runway 12W/30W in operation, it is unlikely that noise will significantly impact the daily lives of the citizenry of St. Charles, their carefully preserved national historic district, or the annual outdoor celebrations of their heritage. Therefore, the FAA has concluded that the new runway will not significantly affect the heart of St. Charles or its national historic district.

Regarding vibration impacts, generally, overflights by fixed-wing, subsonic aircraft do not generate vibration levels of the frequency or intensity to result in damage to structures. It has been found that exposure to normal weather conditions, such as thunder and wind, usually have more potential that could result in significant structural vibration than aircraft. Two recent studies that involved the measurement of vibration level resulting from aircraft operations upon sensitive historic structure concluded that aircraft operations do not result in significant structural vibration. Additional details regarding this comment are addressed in Section 5.1.6, Vibration Resulting from Aircraft Operations, in the FEIS.

13. Effect of Bridgeton's planning and zoning laws on airport expansion

The City of Bridgeton believes that the effects of its planning and zoning laws on the proposed Lambert expansion were not adequately considered by the FAA and STLAA.

In April 1996, the City of Bridgeton sued the City of St. Louis to block the proposed expansion plan. The lawsuit alleged that City of St. Louis officials were taking away Bridgeton's constitutional right to determine how its land is used, by expanding the airport onto land not zoned for airport use. The City of Bridgeton stated that Missouri law gives its residents control over airport expansion by allowing city officials to

determine whether any land is zoned for airport use. The suit asserted that Missouri Revised Statutes, Section 305 prohibits the City of St. Louis from building an airport or landing field in any city in violation of zoning regulations. Since the proposed airport acquisition area in Bridgeton has not been zoned for airport use by the City of Bridgeton, the City of Bridgeton asserted that the proposed expansion plan cannot be built. The suit also claimed that the right of the City of Bridgeton to determine this zoning is guaranteed by the Missouri State Constitution and State statutes, and that as a Constitutional Charter City, Bridgeton is granted by the Missouri Constitution (Article VI, Section 19(a)) full authority to designate zoning within its borders.

The City of St. Louis moved to dismiss the lawsuit on the grounds that it was premature before the FAA issues its Record of Decision. On the merits, St. Louis maintained that the Missouri courts held in a previous suit of a similar nature, that upon balancing the needs of a community, i.e., a local city versus the needs of a metropolitan area for an airport, the needs of the metropolitan area are superseding.

The court dismissed the case, stating that until the FAA issues a ROD, no legal grounds exist to try the case. The outcome of the litigation does not affect the decisions of the FAA following completion of the FEIS. Whether the City of St. Louis is required to obtain a local permit is, in the circumstances, a matter of local law and is not relevant to the approval of the Federal actions pertaining to the expansion of Lambert. The FAA assumes that if the ordinances are finally determined to be applicable to the City of St. Louis, then the City of St. Louis will comply with them or will be exempted.

For the reasons discussed above, there may be little or no inconsistency with local plans. With regard to any restrictions on land acquisition by the City of St. Louis for essential aviation safety and aircraft operation purposes, the FAA notes that such planning policies may be of questionable applicability and legal validity, both under state and Federal law.

This issue was covered previously in the FEIS Sections 5.2.5.1 and 5.2.5.3 and in FEIS Appendix V responses to Comments 5-53, 6-23, and 6-24.

14. Effects of Alternative W-1W on the City of Bridgeton

The City of Bridgeton and its citizens commented that Alternative W-1W would destroy a large part of Bridgeton and there would be effects on the Bridgeton City Hall/Police Station complex.

The FAA acknowledges that Alternative W-1W will cause significant impacts to the City of Bridgeton including community disruption; displacement of residents; acquisition of

community properties, parkland, historic properties, and community facilities; and changes to the local road network. Section 6.3 of the FEIS outlines specific measures to mitigate these impacts.

The FAA recognizes that people's lives will be adversely affected by the acquisition of their homes. The FAA will take all measures available to ensure that the STLAA minimizes the impacts as much as possible and to ensure that programs are implemented in a fair and equitable manner. The disruption of established neighborhoods and displacement of residents will be mitigated by ensuring that all property acquisitions and relocations are implemented according to the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. The airport has committed to expediting and streamlining the acquisition process, after project approval, to minimize the amount of time residents will have to remain in neighborhoods where acquisition would be required. A relocation plan, developed in accordance with the Uniform Relocation Act, will be designed to minimize relocation impacts as much as possible. The relocation counselor assigned to each resident will provide advisory assistance to alleviate the stress associated with moving to a new location.

Because there will be a small area of new residential noncompatible land use in Bridgeton, the FEIS includes specific mitigation for the residential portion of Bridgeton that will be impacted by levels above DNL 65 dB (Section 6.3.1 and Figures 6.2 and 6.3 in the FEIS). Mitigation is not included for the portions of Bridgeton that will be impacted by noise levels below DNL 65 dB, because they are considered a compatible land use.

Section 5.3 of the FEIS discusses the acquisition of commercial properties in Bridgeton. All properties acquired will be entitled to fair market value, including commercial properties, and will be subject to the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

The realignment and/or closure of portions of the local roadway network will be minimized in order to reduce the impacts to the local communities. Those roadways that will be removed are associated with facilities within the acquisition areas. Other areas will be adequately served by the relocated roads. Prior to the construction of any proposed roadway improvements, MoDOT will develop a Maintenance of Traffic Plan designed to reduce impacts of roadway construction and maintain access during construction (Section 6.3.13 of the FEIS).

The effects on Bridgeton City Hall/Police Station complex were previously addressed in the FEIS Appendix V, responses to Comments 5-43, 29-46, 29-58 and 29-74. Alternative W-1W will not have a direct impact on the Bridgeton City Hall. The FEIS

indicates that with the proposed action Bridgeton City Hall would be in the 70 DNL noise contour. Unless the existing structure includes noise attenuation of 25 dB, City Hall would be rendered incompatible in light of its governmental services and office uses, even without noise insulation measures. St. Louis will offer to provide any necessary soundproofing and is willing to work with Bridgeton to relocate City Hall, if necessary.

Parks and recreation facilities to be impacted by Alternative W-1W are described in Section 5.7 of the FEIS. The City of Bridgeton has been consulted regarding these impacts and the potential candidate mitigation sites. The proposed candidate mitigation sites are described in detail in the Section 303 and 6(f) Evaluation, which was released concurrently with the FEIS, and summarized in Section 6.3.5 of the FEIS.

The FAA has considered alternatives that avoid historic properties. As discussed in the Section 303 document, the FAA determined that due to environmental and social consequences, there was no prudent or feasible alternative to avoid the following historic properties in the City of Bridgeton: the Bridgeton Inn, the Airport News Building, the Emmanuel Blum House, the Blum Store, and the De Hatre House, which are eligible for inclusion in the National Register of Historic Places; and the Village à Robert Cemetery (which encompasses the current Bridgeton Memorial Park), which is eligible for inclusion in the National Register of Historic Places under National Register Criterion D. Therefore, there will be an adverse effect on these historic properties, pursuant to 36 CFR 800.9(b). Treatment measures for these adversely affected historic properties are included within the MOA for the selected alternative, W-1W. The MOA was signed by FAA, the SHPO, and the Advisory Council. The STLAA signed as a concurring party. The City of Bridgeton was invited to participate as a concurring party to the MOA, but it chose not to concur in the MOA. The Advisory Council executed the MOA on May 29, 1998. A copy of the MOA is included in Appendix H of this ROD.

15. People Building Community survey objections

People Building Community objects to a survey accomplished as part of the MPS, and referenced in the FEIS, which claims that the majority of residents want to be acquired. A detailed description of this survey, conducted in October 1995, by a subcontractor to the MPS consultant, is contained in Section 8 of the MPS. People Building Community wants FAA recognition of the results of the Peters Marketing Research Survey showing strong Bridgeton opposition to expansion. The FAA's responses to comments on the FEIS submitted by People Building Community are contained in Appendix A of this ROD.

The FAA did not rely on the results of the referenced survey to make its decision. Its existence was only mentioned in the FEIS for informational purposes. Its mention was not intended to minimize or dismiss the concerns of neighboring communities. While the conduct of social surveys might provide information of interest to area residents, the information would not alter or affect the conclusions of an EIS process. The purpose of the EIS was to analyze the potential environmental impacts of the proposed improvements upon the communities surrounding the airport. In some cases, there were no impacts to the communities. In others, there were even positive effects overall. Where there were significant adverse impacts, the EIS examined mitigation to lessen the adverse impacts. The FAA's EIS identified the anticipated impacts associated with the alternatives analyzed and outlined the proposed measures for mitigation for significant impacts associated with the Alternative W-1W.

It is recognized that the impact categories of principal concern to neighboring residents are noise and land acquisition. The social impacts resulting from the airport development would include the displacement of persons, homes, businesses, and community facilities. These would be mitigated by ensuring that all property acquisition and relocations be implemented according to the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

The FAA recognizes that the acquisition/relocation process can be a difficult and emotionally upsetting experience for homeowners. As part of its land acquisition programs, the STLAA offers advisory services to those being relocated. Part of that advisory service is to notify those relocatees of special programs being offered by different agencies. This includes first-time home buyer programs, loan information, and assistance in understanding the various documents.

The FAA has acknowledged throughout the EIS process that some segments of the community strongly oppose the proposed plan. The comments provided by agencies, associations, elected officials and individuals have been thoroughly evaluated by the FAA during the EIS process and have been carefully considered in the development of this ROD. This included the FAA's review of the results of the Peters Marketing Research Survey, which People Building Community requested the FAA to consider. This survey was conducted to determine how many Bridgeton residents feel about the airport expansion.

The FAA acknowledges that there are also residents in the area of the proposed expansion, including Bridgeton residents, who feel they have been held hostage by the expansion process. Given the length of time needed to prepare the planning studies on the proposed expansion, this is understandable. The STLAA has received approximately 250 letters from residents, who indicated that they either need or want to move from their residence because of different hardship situations (STLAA letter dated

July 9, 1998, in Appendix I). The STLAA has received inquiries from another 150 residents, who wish to have their property purchased and move on with their lives. Many of those citizens have also called the FAA's Regional Office over the last several months to express those same views to the FAA decisionmakers on the ROD. The Let's Get On With Our Lives group, which consists of over 1,200 people living in the area proposed for acquisition, has requested that the FAA make a final decision on the Lambert as quickly as possible so that they can relocate (Don Vandervort letter, dated July 9, 1998, in Appendix I).

The FAA has carefully assessed and considered both sides of the issue in making its decision. Fair consideration has been given to the interests of communities in or near the project location throughout the EIS process.

16. Bridgeton's non-concurrence in DOT Section 303/DOI Section 6(f) process

Bridgeton has notified the FAA that it cannot concur in the DOT Section 303/DOI Section 6(f) process, because it believes that the alternative selected did not safeguard park land and other resources warranting special protection. Bridgeton commented on this issue after release of the DEIS, and its position has not changed since that time. For FAA's responses to Bridgeton's comments on this issue, see FEIS Appendix V, numbers 2-78, 10-10, 10-26, 10-27 and 10-34.

FAA environmental documents must provide evidence that replacement of affected Section 6(f) lands to the satisfaction of the Secretary of the Interior will be accomplished. Through its grant agreements, the FAA will require STLAA to comply with mitigation provisions of the FEIS related to replacement of Section 303 and Section 6(f) lands.

As documented in the Section 303/Section 6(f) Evaluation and the FEIS Section 5.7, the FAA will require STLAA to provide the responsible jurisdiction with the funds necessary to replace the converted land. In this case, the City of Bridgeton is considered to be the project sponsor, or subgrantee. It is generally held that in the event the subgrantee is unable or unwilling to replace the converted property, the State becomes fully responsible for actual replacement. Since the City of Bridgeton has declined to participate in the process of selecting and securing replacement lands, responsibility for replacement falls upon the MDNR. If Bridgeton continues to decline to participate in the process, the FAA will require STLAA to provide the funds to the MDNR for replacement of converted lands, providing that conversions-in-use are approved.

On January 28, 1998, the Department of Interior provided its final comments on the FEIS, the Section 303/Section 6(f) Evaluation, and the Section 106 process. Appendix

A of the ROD contains the DOI letter and FAA's responses to those comments. The receipt of DOI's comments completes consultation under Sections 303/6(f).

17. Bridgeton's non-concurrence in MOA for historic/archaeological resources

The City of Bridgeton notified the FAA that it could not concur in the MOA for proposed improvements at Lambert, because the City did not agree with the selection of Alternative W-1W.

As discussed in Section 6 of this ROD, on May 29, 1998, the Advisory Council executed the MOA for the proposed improvements at Lambert (Appendix H of this ROD). Other signatories to the MOA are the FAA and the Missouri SHPO. The STLAA signed the MOA as a concurring party.

The MOA stipulates measures to be implemented to avoid, reduce, or mitigate the adverse effects from this project on historic properties. The SHPO, the Council, the STLAA, and the City of Bridgeton have been consulted on the MOA and provided comments on the agreement document throughout its development (FEIS Appendix N-1, November 18, 1997, letter from MDNR, and November 14, 1997, letter from City of Bridgeton). The FAA solicited final comments on the MOA from the consulting parties, including the City of Bridgeton. As noted above under response to Comment 14, the City of Bridgeton chose not to sign the agreement.

On June 10, 1998, the FAA notified the following parties that the MOA for the Section 106 process had been executed by the Advisory Council: Deputy SHPO at MDNR; DOI; MoDOT, STLAA, and Bridgeton. By entering into and having STLAA carry out the terms of the Agreement, FAA has fulfilled its responsibilities under Section 106 of the National Historic Preservation Act and the Advisory Council's regulations.

18. Analysis of special purpose laws

Compliance with special purpose laws (e.g., for wetlands, water quality, and floodplains) was raised in comments on the DEIS, which are addressed in the FEIS Appendix V response to Comment 2-78.

All of the development alternatives studied in detail have unavoidable impacts on resources protected under Section 303 of the Department of Transportation Act and Section 6(f) of the Land and Water Conservation Fund Act. There are no possible or prudent alternatives to the use of these resources. Of the development alternatives, Alternative W-1W would use approximately half the park and recreational resources and acres required for S-1.

All of the reasonable alternatives have unavoidable wetland impacts due to the proximity of wetlands to the airport. Consequently, there are no practicable alternatives to filling of wetlands. Of the development alternatives evaluated, Alternative W-1W would have the least amount (acreage) of wetland impacts. This information is displayed in Table S.1A of the FEIS (Appendix J of this ROD, page S-9).

Impacts of the project on water quality have been examined in Section 5.6 of the FEIS. See also response to Comment 9-6 in Appendix V of the FEIS. The MDNR also provided its assurance that state water quality standards would be met with the project (MDNR letter dated November 20, 1997, in Appendix A of the FEIS). On August 11, 1998, the Governor of the State of Missouri provided a letter to the FAA certifying that there is reasonable assurance that the proposed construction and operation of the expansion of Lambert will be located, designed, constructed and operated so as to comply with applicable water quality standards (Governor's letter dated August 11, 1998, in Appendix I of this ROD.)

Potential impacts on floodplains were thoroughly evaluated in the FEIS. There is no practicable alternative to the floodplain impacts of the proposed project. Mitigation measures to minimize the floodplain impacts can be accomplished for each alternative so that the floodplain encroachment would not be considered significant. The floodplain mitigation measures are described in the FEIS Section 6.3.8. See also response to Comment 25-4 in FEIS Appendix V.

19. Adequacy of air quality conformity determination

The City of Bridgeton believes the air quality conformity determination prepared by the FAA is inadequate.

Bridgeton's comments on air quality issues were addressed in the FEIS Appendix V responses to Comments 7-18, 7-19, and 7-31 and in the Final General Conformity Determination. Based on EPA, MDNR, and other comments on the DEIS, the FAA has revised and supplemented the air quality analysis in the FEIS and prepared a Draft and Final General Conformity Determination. These documents and supporting underlying material are available for public review. Both EPA and MDNR indicated that the Draft General Conformity Determination was adequate. The Governor has also certified a reasonable assurance that the project will be designed, built, and operated in conformance with applicable air quality standards (Appendix I of this ROD).

The FAA has been very diligent in addressing air quality concerns. In response to comments made by the City of Bridgeton on the DEIS, the FAA revised its air quality analysis to address the effects of FAA Safety Notice N7110.157, "Wake Turbulence," upon the operational assumptions for air quality emission inventories. This notice,

which was issued during preparation of the DEIS, has the effect of reducing airport capacity due to recategorization of certain aircraft types and a resulting increase in separation standards. The Safety Notice results in potentially constraining the 2015 No-Action Alternative at approximately 532,000 operations a year instead of 595,000 as originally projected in the DEIS. The results of the revised analysis show that, with the exception of NOx emissions in 2015, the development alternatives improve air quality in the St. Louis area in comparison with the No-Action Alternative. This is largely the result of increased airfield operational efficiency and reduced delay periods (FEIS Section 5.5.6).

In consultation with the EPA and MDNR, the FAA prepared Draft and Final General Conformity Determinations to address emissions associated with Alternatives S-1 and W-1W, specifically focusing on NOx, CO and VOCs. In December 1997, the FAA issued its Draft General Conformity Determination, along with the FEIS. In June 1998, the FAA issued the Final General Conformity Determination. It was subsequently announced in the *St. Louis Post Dispatch*. By issuing this Final Determination, the FAA has fulfilled its affirmative responsibilities to assure conformity of proposed Federal actions under Section 176(c) of the Clean Air Act, as amended in 1990.

20. Concerns of EPA regarding FAA's air quality modeling assumptions in DEIS

The EPA had questions regarding the assumptions used by FAA in its air quality modeling assumptions in the DEIS.

Based upon the EPA comments received on the air quality analysis in the DEIS, the FAA revised and supplemented information in the FEIS. That information was summarized in the FEIS Section 5.5, and is included in Appendices A and M. The FEIS Appendix V contains responses to EPA's comments on the DEIS (Comments 7-18, 7-69, 7-72, 7-73, 7-81 and 7-85).

Regarding air quality modeling, while EPA agreed that there would be no significant air quality impacts associated with the proposed project, it stated that its conclusion was based on air modeling done by MDNR. The Emissions Dispersion Modeling System (EDMS) is the FAA's preferred model for performing air quality analysis on airports and was utilized in this case for developing project emission inventories for NEPA and general conformity purposes. The development alternative would reduce carbon monoxide (CO) emissions compared to the No-Action and the project so that the project was clearly *de minimis* for CO under general conformity requirements. Although no further analysis was necessary, in response to requests from EPA and MDNR the FAA also conducted a microscale dispersion analysis to address "CO hotspots." It was determined, with EPA's concurrence, that the CAL3QHC and ISCST3 models would be

appropriate to conduct this dispersion analysis. Based on the entire assessment of air quality, including modeling, we concluded that there would be no significant impacts to air quality in the St. Louis area. The modeling conducted by MDNR provided independent, definitive, corroboration of the conclusion. The EPA and MDNR have agreed that inclusion in this ROD of the results of the modeling done by MDNR resolves the air quality concerns expressed in EPA's letter dated February 27, 1998.

As noted above, MDNR provided its assurance that state air quality standards would be met with the project (MDNR letter dated November 20, 1997, in Appendix A of FEIS). On August 11, 1998, the Governor of the State of Missouri provided a letter to the FAA certifying that there is reasonable assurance that the proposed construction and operation of the expansion of Lambert will be located, designed, constructed and operated so as to comply with applicable air quality standards (Governor's letter dated August 11, 1998, in Appendix I of this ROD.)

As discussed in number 19 above, on June 19, 1998, the FAA made its Final General Conformity Determination. A legal notice announcing the Final General Conformity Determination was published in the *St. Louis Post Dispatch* on June 29, 1998. By publishing this Final Determination, the FAA has fulfilled its responsibilities under Section 176(c) of the Federal Clean Air Act.

Therefore, the FAA believes that the analysis of air quality impact satisfies the requirements of NEPA, including public disclosure requirements, and other air quality statutes.

21. Length of FEIS review period

Citizens commented that thirty days to review the FEIS was too short and believed the FAA ignored their comments.

FAA carefully reviewed all comments made by the public and local, state, and Federal agencies during the EIS process. The DEIS was available for review and comment from September 27, 1996 through January 17, 1997. A public hearing, attended by over 1580 people, was held, affording each of them the opportunity to provide written or verbal comments to court reporters. The FAA then carefully reviewed over 15,000 letters received on the DEIS. The FAA aggregated these comments and concerns into 29 major categories for review and written response by qualified personnel. All suggestions were taken into consideration and changes were made to the FEIS where appropriate. In addition, the FEIS was revised in some instances to make it clearer and easier to read and understand. All letters, as categorized, were available for public review at Lambert and at the FAA Regional office in Kansas City, Missouri. All comments received, whether in the form of testimony given to the court reporters at the

public hearing or in the form of letters, were summarized, and responses were provided in the FEIS Appendices S, T, U, and V. Appendix W contained a list of commenters. The FEIS Volumes 1, 2, and 3 were available at 21 city halls and 11 libraries.

The 30-day review period after release of the FEIS is not a public comment period, but rather a minimum period that a Federal agency must wait before issuing a Record of Decision. The FEIS review period is required by CEQ regulation to be no less than 30 days. The review period for this FEIS was approximately 58 days. Late filed comments were considered as practicable. Much of the material provided to the public in the FEIS was not new information, as it was simply clarification or enhancement and refinement of material already in the EIS or was in other documents available during review of the DEIS. CEQ regulations permit the FAA to summarize and respond to comments in the FEIS.

Appendices A and B of this ROD contain responses to comments received during the FAA's review or "waiting" period. Appendices C, D, E and G of this ROD contain responses to comments from ALPA, NATCA, Bridgeton Air Defense, the City of Bridgeton, the City of St. Charles, the St. Charles County Executive, and U.S. Congressman Talent. All comments received by the FAA were reviewed and considered during the decision-making process for this ROD.

22. Inappropriate public hearing format

Commenters stated that the public hearing format was inappropriate. They would have preferred a "town hall" format. Commenters indicated that the FAA failed to provide an adequate opportunity for public input in a "formal" public hearing; therefore, they concluded that fair consideration had not been given to the interests of the communities near the project location.

The FAA recognizes that the "town hall" format is the more traditional approach. However, the format the FAA chose to use was equally acceptable and appropriate. The FAA exceeded NEPA requirements, which do not require Federal agencies to conduct public hearings, when it held the public hearing for the proposed action at Lambert. Federal agencies have wide latitude to structure public hearings as appropriate to facilitate public input for consideration in the decision-making process.

The public hearing was also held to afford an opportunity for a public hearing "to consider the economic, social and environmental effects of the [project] and the [project's] consistency with the objectives of any planning that the community has carried out" (*49 U.S.C. 47106(c)(1)(A)(I)*). The City of St. Louis must certify that this opportunity was provided to qualify for eligibility to receive funds for major airport development projects under the FAA's Airport Improvement Program.

Title 49 U.S.C. 47106(c)(1)(A)(I) does not dictate the manner in which the hearing should be held. No case law requires that a "town hall" or any specific type of hearing take place. The public hearing held for the proposed project met and exceeded the statutory standard that opportunity be provided to consider the effects of the proposed action. The record demonstrates that such opportunity was provided in this case.

The public hearing was held near the airport during the hours of 3 p.m. to 8 p.m. on October 28, 1996. Approximately 1,580 people attended. It was held in an open meeting format. The public could interact with FAA personnel and FAA's consultants at numerous displays or stations, and react to hearing materials provided, presentations made, and the DEIS. Persons could leave written comments, provide oral comments to court reporters, or submit written comments to FAA up until January 17, 1997.

Citizens accessed the public hearing area from an entryway where they were given a proposed project information packet, which contained information about the public hearing format, how to make public comments and a copy of the FEIS Summary about the proposed project itself. Citizens then proceeded through a videotape area, which provided additional information about the proposed project.

In the large hearing room, FAA employees and government contractors, who were involved in the environmental study process, were present the entire time to answer questions and explain exhibits, which were provided to give further information about the proposed project. Government representatives were clearly identified by name tags and circulated through the hearing room to provide opportunity for face-to-face information exchange. All government representatives and contractors present responded to all information sought from them and answered all questions asked of them. This format allowed citizens to view the materials and absorb information at their own pace. Citizens were able to talk to government and contractor representatives directly to obtain meaningful information exchange. In addition, the format allowed citizens to confer among themselves or in small groups with government or contractor representatives in an open forum.

In the middle of the hearing room, all citizens were given opportunity to provide written comments on the proposed project or comments of other persons. In an adjacent area, four court reporters were available to record verbal comments. Citizens had the choice to comment in writing, or verbally to a court reporter. This hearing format provided meaningful, informed community input to this public project. The public was informed about potential economic, social and environmental impacts of the proposed project by government representatives through the information packet, information displays and exhibits and the face-to-face interaction and information exchange. The opportunity for

public comment was afforded in an orderly and open manner. All citizens who wished to comment at the hearing were provided with the opportunity to do so.

The format of the public hearing was selected to allow the attendees to view the materials at their leisure and talk to study team members. In addition, the format allowed for the attendees to talk among themselves and study team members in an open forum. Citizens had the choice to comment in writing or verbally to a court reporter. These are the same choices that would have been available had the FAA used an alternate format.

All comments received were responded to in the FEIS. In this way, informed public comments generated by the public hearing process were communicated to the public and taken into account by decision-makers. The public hearing provided ample opportunity to consider the "economic, social and environmental effects" of the proposed project (*40 U.S.C. 47106(c)(1)(A)*).

For a review of FAA's responses to comments received specifically regarding the public hearing format, see FEIS Appendix V Comments 21-17, 21-26, 21-27, 23-17, and 23-23.

23. Potential conflict of interest for FAA contractor

St. Charles Executive Ortwerth believes that FAA's contractor had a conflict of interest, because data compiled by Greiner were used in the MPS, as well as the EIS, and because St. Louis paid Greiner.

Specifically the commenter argues that Greiner had a conflict of interest for the following reasons:

- Greiner could not assist the FAA in accomplishing an independent review of alternatives as the FAA claims in FEIS response to Comment 2-72 because in April 1995 Greiner prepared an environmental evaluation of alternatives and baseline environmental information for the MPS.

- The MPS indicates that Greiner prepared the environmental evaluation of alternatives. Greiner did not prepare the information for the EIS then provide it to St. Louis as claimed in response to Comment 23-39 of the FEIS because Greiner did the work in April 1995 and scoping for the EIS began in September 1995.

- Greiner was intimately involved in developing the justification for the project; there is no evidence to justify that the FAA conducted an

independent review of alternative studies of the alternatives rejected; very little independent work has been generated that distinguishes the EIS from the MPS prepared by the City of St. Louis.

- Greiner was paid by the project sponsor.

Under 40 CFR 1506.5(c) if a Federal agency decides to select a consultant to prepare the EIS, the consultant must "execute a disclosure statement ... specifying that [it has] no financial or other interest in the outcome of the project. A consultant with a known conflict of interest "should be disqualified from preparing the EIS." (CEQ 40 Questions, 46 Federal Register 18,026 18,031)

Whether there is a conflict of interest depends upon the definition of "financial or other interest" under 40 CFR 1506.5(c). In 1981, the CEQ interpreted the provision "broadly to cover any known benefits other than general enhancement of reputation." (CEQ 40 Questions 46 Federal Register at 18,031). Even then, the CEQ instructed agencies that contractors may bid in competition with others for future work on a project if the contractor has "no promise of future work or other interest in the outcome of the project." (40 Questions at 18,031). Subsequently, the CEQ clarified that, absent an agreement to perform construction on the proposed project or actual ownership of construction site, it is "doubtful that an inherent conflict of interest will exist" unless "the contract for the EIS preparer contains ... incentive clauses or guarantees of any future work on the project." (Guidance Re: NEPA Regulations, 48 Federal Register 34,263 34,266, CEQ, 1983).

In this case, after a competitive bidding process, the FAA selected URS Greiner in November 1992 to prepare the EIS. Greiner's contract was executed with STLAA in 1993.

In April 1995, the FAA requested that Greiner prepare preliminary environmental evaluations so that the FAA could begin to meet its responsibilities to evaluate other reasonable alternatives in preparation for the EIS. To assure consistency in the environmental analysis done as part of the ongoing Part 150, environmental and master planning studies, the FAA had Greiner submit this baseline environmental information and its environmental analysis of alternatives to St. Louis for use in its master planning and airport noise compatibility (14 CFR Part 150) studies. This practice was instituted several years ago as a practical matter to ensure consistency between the two processes. It arose, in part, as a result of a lawsuit filed by the City of Bridgeton, which challenged approval of the use of passenger facility charges for noise mitigation projects. The major issue was the adequacy of the environmental analysis, because the noise analysis done by the consultant that prepared the Part 150 study

differed from that done by another consultant as part of a concurrent environmental study.

This practice does not constitute a conflict of interest. URS Greiner has executed the disclosure statement required under 40 CFR 1506.6(c) specifying that it has no financial or other interest in the outcome of the project. URS Greiner's only assignment at Lambert has been to assist the FAA in the EIS and at no time during the Lambert expansion process have they been involved in any other contract that could be construed to represent a conflict of interest. There have been no guarantees of future work or incentive clauses in the EIS contract.

While Greiner did prepare the environmental overview for the FAA, which was used as an appendix in the MPS, it did not participate in the STLAA's development of the airport facility needs or the selection of its preferred alternative for the project. Nor did Greiner's preparation of this factual information interfere with its ability to assist the FAA in using its judgment to independently review the range of primary and secondary alternatives to decide which to analyze in the FEIS. The FAA was actively participating in the MPS process at this point. This participation included independent operational analysis and input regarding the development and analysis of alternatives. Once the MPS was submitted to the FAA, as required, the FAA then independently reviewed and analyzed the development alternatives identified in the MPS as well as exploring other alternatives not identified in the MPS. These alternatives included different runway layouts, construction of a new airport facility as well as some publicly submitted alternatives. For a discussion on FAA involvement in the analysis of alternatives, see Section 3.0 of the FEIS.

Moreover, preparation of this information did not give Greiner any incentive to promote the Alternative W-1W over the No-Action Alternative. Providing information to St. Louis, at the FAA's direction, did not result in an enforceable promise, contract, or expectation of future work on the project or other interest in the outcome of the project so as to compromise the integrity of the NEPA process.

To the extent that FAA's practice could be perceived to give rise to a conflict, the FAA exercised a sufficient degree of supervision to cure any defect arising from the perceived conflict and preserve the objectivity and integrity of the NEPA process.

When an agency is integrally involved in the preparation of an EIS, that involvement diminishes the threat posed by any potential conflicts of interest because the agency then has the opportunity to direct the analysis and supplement areas it deems deficient. The record indicates that FAA exercised substantial supervision over the preparation of the EIS. Even after Greiner was hired, FAA continued to perform all management activities and only used Greiner's personnel for technical expertise or to supplement

staff where there was insufficient manpower. FAA managers made all major decisions involved in the FEIS and Greiner's representatives reported to those managers, sometimes on a daily basis, to receive direction. Throughout the environmental process, approximately 90 percent of one FAA environmental program manager's work hours were dedicated solely to managing Greiner and its work products. Other FAA personnel, including airport planning specialists and air traffic controllers, reviewed and corrected Greiner work products, as needed. In addition, FAA prepared, without Greiner's assistance, those portions of the FEIS addressing airport planning and air traffic control issues, particularly responses to comments in FEIS Appendix V. The FAA independently and extensively reviewed all of Greiner's analyses, commented on Greiner's field data and written product, noted deficiencies in the data and analyses, gave direction to the work, and frequently required Greiner to gather more facts or perform supplemental analysis on aspects of the project. This degree of supervision exercised by the FAA protected the integrity and objectivity of the EIS.

Finally, with respect to the commenter's final point, the payment of Greiner by the City of St. Louis does not present a conflict of interest. Greiner was selected by the FAA to prepare the EIS using a common practice known as third-party contracting. Under this practice, the City of St. Louis entered into a contract with Greiner to fund work done on the EIS under the direction and supervision of the FAA. Approved by CEQ, third-party contracting is utilized by many Federal agencies during the preparation of an EIS (40 CFR 1506.5(c) and Forty Most Asked Questions No. 16). So long as the lead agency, or in certain cases the cooperating agency, selects the consulting firm to do the work, the project sponsor is permitted to pay the consultant. Once selected, the preparer's responsibility is to the lead agency to prepare an EIS that complies with NEPA. Third-party contracting is a voluntary practice that is ultimately beneficial to both the agency and the applicant. By paying for the preparation of the EIS, the applicant ensures that movement of its application will not be determined by the budgetary constraints of the agency it is dealing with. At the same time, the agency in question is able to focus its resources on analysis and evaluation rather than the preparation of the EIS.

In this case, the FAA selected Greiner to prepare the EIS. Greiner's responsibility was solely to the FAA to prepare an EIS that met NEPA regulations and FAA's NEPA procedures. As required by CEQ regulations, a memorandum of understanding (MOU) was executed between St. Louis and FAA setting out the procedures to be followed during the third-party contract process. Under the MOA, it was the FAA's responsibility to determine the scope of the EIS, evaluate all environmental data and analysis submitted by Greiner or St. Louis, and to revise or cause additional study and analysis to be performed as necessary.

In conclusion, none of the commenter's concerns have raised issues sufficient to show that the objectivity and integrity of the NEPA process has been compromised.

Greiner's actions were within the scope of its duties. It has properly disclosed that it had no interest, financial or otherwise, in the outcome of the project. The FAA independently evaluated the alternatives analysis and exercised supervision over Greiner's work.

This matter is also discussed in response to the City of St. Charles FEIS Comment FL0004, Comments 28 through 36 of this ROD.

24. <u>FAA realizes Lambert will not operate as planned and must prepare a revised or supplemental EIS</u>

According to commenters, the FAA has revealed that Lambert will not operate as planned and must withdraw and revise the FEIS or prepare a supplemental EIS to address the proposed new runway use. Specifically, ALPA, NATCA and the City of Bridgeton indicate that the FAA now plans to use the new Runway 12W/30W primarily for arrivals, instead of exclusively for departures in west flow during VFR 1 and 2 conditions (good weather) as analyzed in the MPS and the FEIS. As proof, the City of Bridgeton relies upon an excerpt from a preliminary draft memorandum prepared by Leigh Fisher Associates dated June 16, 1998. The memorandum states, in relevant part, "For W-1W, the Tower representatives recommended assuming no significant use of visuals to the close parallels (see response to Comment 7 below)." The commenters claim that this change in runway use would significantly impact communities southeast of the airport and requires a revised or supplemental EIS.

The commenters are correct that the environmental impacts in the FEIS, including the noise contours (or footprint), were predicated upon the assumption that the new runway would be used primarily, but not exclusively, for departures during good weather and in west flow. Thus, there would be some arrivals to the new runway. The FAA has not changed its plans for runway use. The statement in the Leigh Fisher Associates preliminary draft memorandum cannot be read in isolation, but rather in the broader context of the sensitivity analysis and related hypothetical assumption concerning arrival rates to which it relates. Appendix C of this ROD clarifies that although this assumption was made, it was only for purposes of modeling. The original assumptions in the MPS and FEIS remain valid. That the FAA elected to include a scenario that featured use of outboard runways during visual conditions and west flow (the "W-1W Outboards Case," see Appendix C, response to Comment 7), did not reflect an FAA realization, decision or intention to change the planned operation of new Runway 12W/30W.

This statement "For W-1W, the Tower representatives recommended assuming no significant use of visuals to the close parallels" is best understood in the context of the related comment from ALPA to which it also responds. As part of its 18 concerns,

ALPA also commented that the MPS and FEIS incorrectly assumed that visuals to the existing closely spaced runways would be independent and arrive at a rate of 80 per hour and should have assumed a rate of 60 per hour instead. This change in assumption clearly would have the effect of increasing delays at the existing airport and under Alternative W-1W. By the referenced statement, the controllers at the June 15 meeting meant that, if the arrival rate during visual and west flow use of the closely spaced existing parallel runways was assumed to be only 60 aircraft per hour, then they agreed with ALPA that it should also be assumed that they would try to minimize delays by using the new runway more for arrivals than for departures. That is, to boost the arrival rate they would seek to use both outboard runways (the existing 30R and the new 30W) primarily for arrivals in west flow during VFR-1 and 2 conditions, instead of limiting its use to departures. The capacity studies done for the MPS estimated an arrival rate of 72 aircraft an hour, not 80 as asserted by ALPA.

Internal agency deliberations after the June 15, 1998, meeting and the preparation of this preliminary draft memorandum by St. Louis' consultant, including discussions with the Air Traffic Division of the Central Region, have confirmed that the FAA has not changed plans to operate Alternative W-1W. Those discussions have also confirmed that the assumptions used in the MPS and FEIS are reasonable and reflect the proposed operation of the airport. The results of the sensitivity analysis confirm that an arrival rate of 60 per hour is an unreasonable assumption. It results in delays greater than those currently experienced at the airport now. This issue is discussed in more detail in Appendix G, response to Comment 7.